

**REMARKS**

Favorable reconsideration and allowance of the subject application are respectfully requested in view of the following remarks.

**Summary of the Office Action**

Claim 9 stands objected to because of informalities.

Claims 1, 5, 8, 9, 13, 16-20 and 22-25 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Salisbury* (U.S. Patent No. 5,303,074).

Claims 2-4, 6, 7, 10-12, 14 and 15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Salisbury* in view of *Henley* (U.S. Patent No. 5,459,410).

Claims 21 and 26 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Salisbury* in view of *Baum et al.* (U.S. Patent No. 5,407,710).

**Summary of the Response to the Office Action**

Claims 2, 10, 20 and 25 have been canceled without prejudice or disclaimer by this amendment. Applicant also has amended claims 1, 3, 8, 9, 11, 17 and 22. Accordingly, claims 1, 3-9, 11-19, 21-24 and 26 are currently pending.

**Claim Objection**

Claim 9 stands rejected to because of informalities. Applicant has amended claim 9 by adopting the Examiner's helpful suggestions. Accordingly, Applicant respectfully requests that the objection to claim 9 be withdrawn.

**Claim Rejections Under 35 U.S.C. §103(a)**

Claims 1, 5, 8, 9, 13, 16-20 and 22-25 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Salisbury*. Claims 2-4, 6, 7, 10-12, 14 and 15 stand rejected under 35 U.S.C.

§103(a) as being unpatentable over *Salisbury* in view of *Henley*. Claims 21 and 26 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Salisbury* in view of *Baum et al.* These rejections are respectfully traversed for at least the following reasons.

Claims 2, 10, 20 and 25 have been canceled without prejudice or disclaimer, thereby rendering the rejections of claims 2, 10, 20 and 25 moot.

With regard to claims 1, 3-9, and 11-16, Applicant respectfully submits that *Salisbury*, *Henley*, and *Baum et al.*, whether taken alone or in combination, do not render at least independent claims 1 and 9 unpatentable, because none of *Salisbury*, *Henley* and *Baum et al.* teaches or suggests every limitation of independent claims 1 and 9, as newly-amended. For instance, Applicant respectfully submits that *Salisbury*, *Henley*, and *Baum et al.*, whether taken alone or in combination, fail to teach or suggest the claimed combination as set forth in independent claim 1, as newly-amended and previously recited by claim 2, including at least "wherein the repair pattern bypasses to pixel electrodes adjacent to the data line and has a portion overlapping the pixel electrodes," and the claimed combination as set forth in independent claim 9, as newly-amended and previously recited by claim 10, including at least "wherein the repair pattern bypasses to pixel electrodes adjacent to the scan line and has a portion overlapping the pixel electrodes."

The Office Action appears to assert that the scan line (102), the data line (103) and the repair lines (122 and 123) as taught by *Salisbury* correspond to the scan line, the data line and the repair pattern as set forth in the claimed invention. However, the Office Action acknowledges that *Salisbury* does not disclose the repair pattern bypassing to pixel electrodes adjacent to the data/scan line and having a portion overlapping the pixel electrodes as recited in claims 2 and 10.

Nonetheless, the Office Action appears to assert *Salisbury's* repair lines (122, 124) in view of the conductive bridge (88) as taught by *Henley* further correspond to the repair pattern of the claimed combinations as set forth in claims 2-4, 6, 7, 10-12, 14 and 15. However, *Henley* merely discloses cutting a gate line (15) at locations (80, 82) to sever the short circuit at a crossing of the gate line (15) with a data line (13), and forming a conductive bridge (88). See FIG. 12c of *Henley*. The Office Action specifically asserts that because *Henley's* gate line (15) and data line (13) form pixel regions, the conductive bridge (88) must bypass to pixel electrode and have a portion overlapping the pixel electrodes. See paragraph 4, lines 8-10 of the Office Action. Yet, as shown in FIGs. 6 and 14 of *Henley*, no portion of the gate and data lines (15, 13) and no portion of the crossing of the gate and data lines (15, 13) overlap with a pixel (11). Accordingly, it is respectfully submitted that *Henley* in combination with *Salisbury* fails to teach or suggest a repair pattern bypassing to pixel electrodes adjacent to the data/scan line and having a portion overlapping the pixel electrodes as set forth in the claimed combinations.

Further, it is respectfully submitted that *Baum et al.* is not relied upon to teach a repair pattern bypassing to pixel electrodes adjacent to the data/scan line and having a portion overlapping the pixel electrodes, and does not remedy the deficiencies of *Henley* in combination with *Salisbury* at least in this regard.

With regard to claims 17-19, 21-24 and 26, Applicant respectfully submits that *Salisbury*, *Henley*, and *Baum et al.*, whether taken alone or in combination, do not render at least independent claims 17 and 21 unpatentable, because none of *Salisbury*, *Henley* and *Baum et al.* teaches or suggests every limitation of independent claims 17 and 21, as newly-amended. For instance, Applicant respectfully submits that *Salisbury*, *Henley*, and *Baum et al.*, whether taken

alone or in combination, fail to teach or suggest the claimed combination as set forth in independent claim 17, as newly-amended and previously recited by claim 20, including at least “forming an insulating material to fill portions between the first and second segments of the data lines and between the second and third segments of the data lines.” Similarly, Applicant respectfully submits that *Salisbury*, *Henley*, and *Baum et al.*, whether taken alone or in combination, fail to teach or suggest the claimed combination as set forth in independent claim 22, as newly-amended and previously recited by claim 25, including at least “forming an insulating material to fill portions between the first and second segments of the scan lines and between the second and third segments of the scan lines.”

The Office Action asserts at page 6, lines 3-7 that *Salisbury* discloses at column 7, line 65 to column 8, line 3 that “electrically insulating conductive lines are typically by forming an intermediate layer of dielectric material between the conductive lines. Therefore, using insulating material to fill the portions between the severing segments of the data line or scan lines as claimed in claims 5, 13, 20 and 25 would have been at least obvious.” However, Applicant respectfully submits that this portion of *Salisbury* merely discusses that “[r]epair lines 122, 123 are electrically insulated from transmission lines 102, 103 typically by an intermediate layer...of dielectric material such as silicon oxide or silicon nitride”. In other words, *Salisbury* at most teaches that dielectric material is formed between the repair line and the scan and data lines. Thus, Applicant respectfully submits that *Salisbury* fails to teach or suggest the feature “forming an insulating material to fill portions between the first and second segments of the data lines and between the second and third segments of the data lines,” as set forth in independent claim 17, and the feature “forming an insulating material to fill portions between the first and

second segments of the scan lines and between the second and third segments of the scan lines," as set forth in independent claim 22.

Further, it is respectfully submitted that *Henley* and *Baum et al.* are not relied upon to teach an insulating material to fill between segments of data/scan lines, and do not remedy the deficiencies of *Salisbury* at least in this regard.

M.P.E.P. §2143.03 instructs that "[t]o establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)." Since, in view of the above, *Salisbury*, *Henley*, and *Baum et al.*, whether taken alone or in combination, fail to teach or suggest each and every element set forth in independent claims 1, 9, 17 and 22, as amended, it is respectfully submitted that *Salisbury*, *Henley*, and *Baum et al.*, whether taken alone or in combination, do not render claims 1, 9, 17 and 22 unpatentable. Since claims 3-8, 11-16, 18-21 and 23-26 depend from claims 1, 9, 17 and 22, it is respectfully submitted that *Salisbury*, *Henley*, and *Baum et al.*, whether taken alone or in combination, also do not render claims 3-8, 11-16, 18-21 and 23-26 unpatentable. Accordingly, withdrawal of the rejections of claims 1, 3-9, and 11-26 under 35 U.S.C. §103(a) is respectfully requested.

### Conclusion

In view of the foregoing, withdrawal of the rejections and allowance of the pending claims are earnestly solicited. Should there remain any questions or comments regarding this response or the application in general, the Examiner is urged to contact the undersigned at the number listed below.

If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

**MORGAN, LEWIS & BOCKIUS LLP**

By: 

Victoria D. Hao

Registration No. 47,630

Dated: July 10, 2003

**Customer No.: 009629**

**MORGAN, LEWIS & BOCKIUS LLP**

1111 Pennsylvania Avenue, N.W.

Washington, D.C. 20004

Telephone: 202.739.3000

Facsimile: 202.739.3001